

## N49RF ERROR SUMMARY

## ENRR Mission Flight #1 21 January 2016



Flight ID: 20160121N2

Sensor or systemNumber or NameStatic Pressure ProbePSM.2Dynamic Pressure ProbePQM.2Total Temperature ProbeTTM.4Dewpoint Temp. ProbeTDM.1XVertical AccelerometerAccZfilterI.1AltimeterAltGPS.3

INE Selection

Differential Attack Pressure Probe

Differential Sideslip Pressure Probe

PDALPHA.2

PDBETA.1

Dynamic Attack Pressure Probe

Dynamic Sideslip Pressure Probe

PQALPHA.2

PQBETA.1

Flight Directory acdata/2016/MET/20160121N2

Local Met Data: <u>Takeoff - PHNL</u> (2100Z) <u>Landing</u> – PHNL (0447Z)

Aircraft Static Pressure 1014.6 mb 1014.2 mb Tower Pressure (corrected) 1018.2 mb 1016.9 mb

## Notes

The Edgetech dewpoint sensor (TDM.1)\* was the most representative dewpoint sensor throughout and was therefore used as the source. However it did require one manual edit to correct for an unrealistic spike in data. Specifically, TDM.1 was edited/corrected between 01:20:30Z through 01:33:15Z.

Takeoff/Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

SPECIAL NOTE!!! The variable names dpj\_wgs, dpj\_was, and dpj\_wz in the netCDF file represent vertical ground, vertical air, and vertical wind speeds respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

\*TDM.1 and TDM.2 are not rated for use under -50 deg C, so neither can be considered reliable for dew points colder than -50C. While normally reliable at lower altitudes, both dew point sensors displayed anomalously low values and abnormal oscillations during takeoff climb and descent to landing. Therefore, all flight level humidity data for this mission should be considered suspect. All other sensors performed nominally.

| Expendable Type   | Number deployed | Number good | Number of messages transmitted |
|-------------------|-----------------|-------------|--------------------------------|
| GPS dropwindsonde | 31              | 31          | 30                             |
| Test Sondes       | 0               | 0           | 0                              |

Flight Director: Mike Holmes
Phone #: (813) 828-4621